REMARKS

Favorable reconsideration and allowance of the present application are respectfully requested in view of the foregoing amendments and the following remarks.

Claims 38-76 are currently pending in the present application, including independent claims 38, 55, and 68. Independent claims 38, 55, and 68 have been amended in this paper.

As an initial matter, one paragraph at page 1 of the specification has been amended herein to correct an inadvertent error. This amendment finds support in the specification, for example, at page 4, line 21 – page 5, line 2.

Independent claim 38, for instance, is directed to a wound or stacked paper product that comprises a first single-ply layer positioned adjacent to a second single-ply layer. The first and second single-ply layers are formed from at least one paper web that contains a surface that defines ridges and valleys. Bridging regions are formed into the surface of the paper web, and these bridging regions have a length sufficient to extend between the peaks of at least two of the ridges. The bridging regions also have a length-to-depth ratio of from about 5:1 to about 40:1. The bridging regions at least partially obstruct the ridges and valleys of the first single-ply layer from mating with the ridges and valleys of the second single-ply layer to inhibit nesting between the first single-ply layer of the wound or stacked paper product and the second single-ply layer of the wound or stacked paper product.

As described in Applicant's specification, wound or stacked paper products containing multiple layers of a paper web having ridges and valleys may exhibit a certain degree of "nesting." Nesting occurs when the ridges and valleys of one layer are

placed adjacent to corresponding ridges and valleys of another layer and the ridges and valleys of the two layers mate. For example, Applicant's Figure 11 illustrates nesting between wraps 2 and 3 ("layers" 2 and 3) of a wound paper product. Similarly, Applicant's Figure 3 illustrates nesting between two layers of a stacked paper product.

Nesting causes the wound or stacked paper product to become more tightly packed, thereby reducing roll bulk and increasing the density of the roll. (Appl., p. 1, lines 22-30). Applicant's claimed paper product and methods, then, reflect the desirability of eliminating this bulk reduction and making the process of winding or stacking a final paper product more consistent and controllable. (Appl., p. 4, line 21 – p. 5, line 8).

In the Office Action, independent claims 38, 55, and 68 were rejected under 35 U.S.C. § 103(a) as being unpatentable over U.S. Patent No. 6,348,131 to Kershaw, et al. Kershaw, et al. is directed to *multi-ply* embossed absorbent paper products. (See col. 3, lines 39-41; claims 1-60). The paper products of Kershaw, et al. are provided with undulations that may extend both longitudinally in the machine direction (or along the principal undulatory axis) and in the cross direction to provide the paper web or absorbent sheet with a biaxially undulatory structure. (Col. 3, lines 28-39; col. 6, line 61 – col. 7, line 12; Fig. 4). Kershaw, et al. then provides embossing, using very specific embossing parameters, to the undulated web. (Col. 7, lines 12-15, lines 54-65, etc.). Embossment patterns used for the paper products of Kershaw, et al. are shown in Figs. 6-12, wherein the embossments are arranged in floral patterns, hexagonal patterns, and a plurality of diamond-shaped arrays, repeating over the surface of the sheet. Typically

the embossment patterns on the paper products of Kershaw, et al. extend over up to about 50% of the web. (Col. 8, lines 44-56; claim 1).

Applicant respectfully submits that the paper product and methods recited in independent claims 38, 55, and 68 would not have been obvious to one of ordinary skill in the art in view of Kershaw, et al. for several reasons. First, Kershaw, et al. does not disclose or suggest a wound or stacked paper product that is particularly formed to inhibit *nesting* between a first *single-ply layer* of a wound or stacked paper product and a second *single-ply layer* of that wound or stacked paper product. Kershaw, et al.'s entire focus is on *multi-ply* absorbent paper products and methods of making such *multi-ply* paper products. (See claims 1-60). Accordingly, the only mention of "nesting" in Kershaw, et al. concerns "nesting" that can occur between *two plies* of a *multi-ply* absorbent paper product when those *two plies* are bound together:

> During the binding of *two or more paper plies together* each ply may be displaced in the cross direction so that the "peaks" of the undulations of one ply are either bound with the peaks or the "valleys" of the undulations of the other ply. In this manner if the peaks of one ply are arranged to nest in the valleys of the other ply *a relatively dense two ply web will be formed*. If, on the other hand, the peaks and valleys of one ply are opposed to the peaks and valleys of the other ply *a very thick, soft two ply web will be formed*. In this manner the density of *the two ply web* can be readily controlled, depending on the application for which the paper product is intended.

(Col. 11, lines 10-20) (emphases added).

In contrast, Applicant's claimed invention is specifically directed to inhibiting the nesting that—without the specially formed bridging regions—would occur between a first single-ply layer of a wound or stacked paper product and a second single-ply layer of that wound or stacked paper product. By way of example, Applicant's Figure 2

shows a stacked paper product in which bridging regions 16 at least partially obstruct the ridges 12 and valleys 14 of the first single-ply layer 60 from mating with the ridges 12 and valleys 14 of the second single-ply layer 70. This specially designed structure thereby *inhibits nesting between the single-ply layers 60 and 70.* Applicant respectfully submits that no such inhibition of nesting between two single-ply layers of a wound or stacked paper product is taught or suggested by Kershaw, et al. and, therefore, independent claims 38, 55, and 68 patentably define over Kershaw, et al.

Moreover, assuming that Kershaw, et al. does teach some sort of "inhibition of nesting" between the *two plies* of its *multi-ply* absorbent paper products, it is apparently **not** Kershaw, et al.'s specific emboss patterns that have anything to do with preventing such "nesting" between the plies. This is because Kershaw, et al.'s only disclosed "solution" to nesting requires *physical displacement* of one or more of the plies in the cross direction so that the peaks and valleys of one ply are *opposed to* the peaks and valleys of the other ply. This type of "physical displacement" is exactly the kind of "solution" the paper products and methods of Applicant's claimed invention seek to avoid.

As shown, by way of example only, in Applicant's Figure 2, single-ply layer 60 would never have to be "physically displaced" in the cross direction relative to single-ply layer 70 to inhibit nesting between the two layers **because of** the Applicant's calculated and deliberate selection of bridging regions 16 that resolve the problem of layer 60's ridges and valleys mating or "nesting" with layer 70's ridges and valleys. Thus, Applicant respectfully submits that the disclosure in column 11 of Kershaw, et al. regarding "nesting" fails to teach or suggest inhibition of nesting by way of specifically-

formed bridging regions and fails to teach or suggest inhibition of nesting between the single-ply layers of a multi-layered wound or stacked paper product as presently claimed by Applicant. Accordingly, Applicant respectfully submits that independent claims 38, 55, and 68 patentably define over Kershaw, et al.

In determining the differences between the prior art and the claims, the question under 35 U.S.C. § 103 is not whether the differences themselves would have been obvious, but whether the claimed invention *as a whole* would have been obvious. A part of this "claimed invention as a whole" inquiry requires consideration that Applicant has discovered a specific solution to the specific problem of *nesting* between the single-ply layers of a *stacked or wound paper product*—wherein this solution involves forming bridging regions into a surface of a paper web that contains ridges and valleys so that those bridging regions (1) have a length sufficient to extend between the peaks of at least two of the ridges, and (2) have a length-to-depth ratio of from about 5:1 to about 40:1, so that the bridging regions at least partially obstruct the ridges and valleys of a first single-ply layer from mating with the ridges and valleys of a second single-ply layer *to inhibit nesting between* those single-ply layers. Applicant respectfully submits that this claimed invention, as a whole, would not have been obvious to one of ordinary skill in the art in view of the disclosure of Kershaw, et al.

For at least the reasons set forth above, then, Applicant respectfully submits that independent claims 38, 55, and 68 patentably define over Kershaw, et al.

Dependent claims 49 and 50 were rejected under 35 U.S.C. § 103(a) as being unpatentable over Kershaw, et al. in view of U.S. Patent No. 5,048,589 to Cook. Further, dependent claims 39-48, 51-54, 56-67, and 69-76 were rejected under 35

U.S.C. § 103(a) as being unpatentable over Kershaw, et al. Applicant respectfully submits that for at least the reasons indicated above relating to corresponding independent claims 38, 55, and 68, the dependent claims patentably define over the references cited. However, Applicant also notes that the patentability of the dependent claims certainly does not hinge on the patentability of independent claims 38, 55, and 68. In particular, it is believed that some or all of these claims may possess features that are independently patentable, regardless of the patentability of claims 38, 55, and 68.

As such, for at least the reasons set forth above, Applicant respectfully submits that the present claims patentably define over all of the prior art of record. It is believed that the present application is in complete condition for allowance and favorable action, therefore, is respectfully requested. Examiner Halpern is invited and encouraged to telephone the undersigned, however, should any issues remain after consideration of this Amendment.

Please charge any additional fees required by this Amendment to Deposit Account No. 04-1403.

Respectfully submitted,

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Date: March 8, 2005